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traffic & control communication

Cab Radio CR26

New Generation: MESA26

The CR26 is a terminal unit for the purpose of single- and dual mode train radio, shunting radio and data applications which operates in the GSM-R network. It fulfils the European requirements for use in rail vehicles.

The CR26 is the main component of a digital train radio systems. It consists of the digital transmission and receiving device, the controls, the interface modules for the external devices and the internal power supply. The CON26 module controls the radio link, regulates the priority of the calls, controls the operating devices, the additional data applications and the interface modules. Software, configuration and diagnostic data can be read and/or updated of the CR26 via the LAN interface and over the air interface (if supported by network).

The terminal unit operates in accordance with GSM 05.05 Phase 2+ and in the extended GSM / GSM-R -frequency range in the following frequencies:

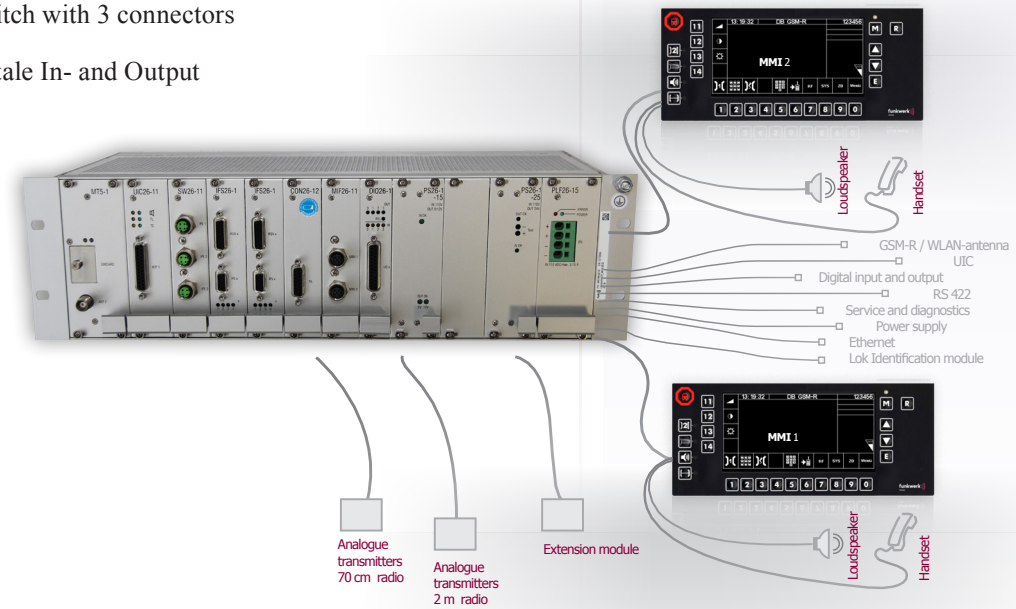
- Transmitting frequency range: 873 to 915 MHz
- Receiving frequency range: 918 to 960 MHz.

In joint operation with operating device MMIS, handsets and loudspeakers, the CR26 realises EIRENE functionality. This standard model can be equipped with the following assemblies:

- up to 2 **IFS module** with 2 serial interfaces for data transmission
- **UIC26 module** for connecting to the train's internal line (according UIC 568)
- SW26 module ethernet switch with 3 connectors
- DIO26 module with 4 digitale In- and Output

MESA26: The universal system architecture contains uniform and standardised interfaces and sub-assemblies conceived as 19" plug-in printed circuit boards. Thereby an easy and fast exchange of the sub-assemblies and the possibility of using the sub-assemblies in all equipment variants and types is guaranteed. The consistent replacement assemblies ensures cost optimised spares inventory to permit fast and efficient repair and minimized training needed by the maintenance personnel.

Additional extension modules can be connected via ethernet connection to the MESA26.



CR26

Technical Specification

Power Supply	
Input voltage	24 / 36 / 48 / 72 / 110 V_{DC}
Tolerances	according to DIN EN 50155
Interruption	according to DIN EN 50155, classe S1 (no interruption)
Maximal input power	nominal 200 W (calculated)
Maximal power consumption	8 A (on voltage 24 V)

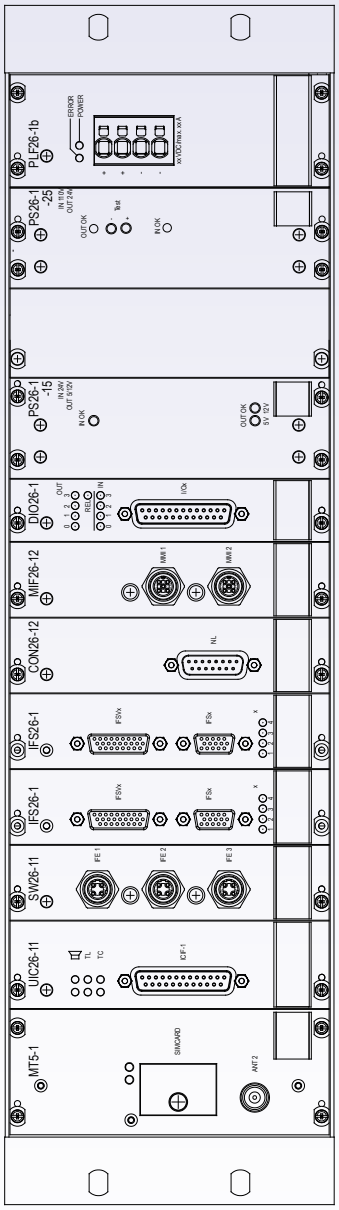
Environmental Conditions	
Protection class	IP 20 according to DIN EN 60529
Vibration and shocks	according to DIN EN 50155
EMC	according to DIN EN 50121-3-2 and DIN EN 50155

Climatic Conditions	
Operating temperature range	-25 °C to +70 °C (EN 50155 T3)
Storage temperature range	-40 °C to +70 °C (in original package)
Maximal gradient	± 1 °C/min of ambient temperature
Maximal humidity	75 % in annual average
Relative humidity	95 % on max. 30 days per year
Altitude and pressure fluctuation	-100 m to 1800 m above sea level

Interfaces	
Operating devices MMIC	2 x circular connector M12
Antenna connection	TNC-female GSM-R; TNC-female WLAN or GPS (Option)
UIC line	25-pin D-Sub (Option)
Digital input and output	25-pin D-Sub (Option)
RS422	1x 25-pin HD-D-Sub ; 1x 15-pin HD-D-Sub (Option)
Service, diagnostics	circular connector M12
Extension interface IFE	circular connector M12
Lok identification module NL	15-pin D-Sub
Miscellaneous	power supply, protective earth connector

Note	
Designation scheme	CR26 (input voltage) optional: MT5 /UIC / SW / IFS / IO
System identification	MESA26-xx: including central unit (CR26), operating unit(s) MMIC, handset(s), loudspeaker(s) and cables

Dimensions+ Weight	
Construction	Module rack (3U/84HP)
Width	258,7 mm
Height	128,4 mm
Depth	238 mm
Weight	max 10 kg



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